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FACULTY DEVELOPMENT REVIEW

THE CLINICAL TEACHER

# Understanding gateway to medicine programmes

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## SUMMARY

**Background:** Supporting underrepresented groups in pursuing, applying and matriculating into medical education is a key issue in the field. In the United Kingdom, Gateway to Medicine programmes were created as a specific form of entry to medical education, to support diversification goals. Whilst well-established, how these programmes are broadly designed and implemented, and how their functioning links to conceptual views of diversity, is not well described in the literature.

**Methods:** This article explores relevant diversity-related literature, including a specific review of all Gateway programmes.

**Findings:** Key facets of diversity-related work in medicine, including the distinction between 'widening participation' and 'widening access' are discussed. These distinctions frame the presentation of Gateway years; their selection process, structure and function are described. The purpose of these years is then discussed, with the lens of different discourses around diversity in medicine, to provide theoretical and practical considerations. Recommendations for how faculty can better explore diversity-related issues are also provided.

**Conclusion:** Gateway programmes may be effective, to some extent, in widening access to medical education, but require considerable resourcing to operate. Though heterogenous in nature, these programmes share common elements. However, discourses around the goals and purpose of this diversification vary based on individuals and institutions. These varied perspectives, as well as the societal and historical implications of diversity-related work, are important for all clinical educators to understand with depth, and address directly, in order to reduce inequalities both within medical education and society at large.

## 1 | BACKGROUND

Medicine is a mirror of the general inequalities in society, and medical education is a hand that raises that mirror. Access to medicine is largely restricted to those from socioeconomic advantaged backgrounds.[1] Students from low socioeconomic backgrounds are still largely underrepresented in the United Kingdom (UK) medical schools; 80% of medical students come from only 20% of high schools.[2] This socioeconomic underrepresentation is the target for most diversity-oriented initiatives in UK medical schools, whilst internationally, 'underrepresentation' and initiatives may be more focused on race and ethnicity, indigenous groups, or those from rural backgrounds.[3-5] Despite being an epiphenomena of more general social inequities, the responsibility for addressing such inequalities has

**TABLE 1** Definitions of widening participation versus widening access

| | Widening participation | Widening access |
|---|---|---|
| Definition, broad | 'Participation': the action of taking part in something | 'Access': the means or opportunity to approach or enter a place |
| Definition, specific to medicine | Policy and programmes designed to support aspirations, recruitment and application of individuals from underrepresented background to *apply to (or wish to take part in)* medical education | Policy and programmes designed to create fairness in the selection process, so that individuals from underrepresented backgrounds, *can achieve entry to (or the means / opportunity to enter medicine)* medical education |
| Examples | Outreach programmes, application-focused support, practice interviews, mentorship programmes, work experience, teacher/career advisor guidance | Change in selection process, contextual admissions, reserved spots for underrepresented applicants, affirmative action (eventually ruled partially illegal in the United States) |

been delegated by governments to universities. Thus, many higher education institutes are allocated quotas related to diversity goals. These have led to initiatives created by medical schools addressing this underrepresentation.

In the United Kingdom, Gateway to Medicine years are typically relatively small-scale programmes intended to support matriculation of underrepresented students into medical education. However, they are resource intensive; Gateway years require an additional year of curricula to be added to medical education, with specialised selection processes and elevated student support. Since their inception in the early 2000 s, there has been a rapid increase in the number of medical schools with these programmes; from only seven UK programmes in 2017, to 17 recognised by the Medical Schools Council for 2021 entry.[6]

Despite this expansion, there is little relevant published research.[7-9] This contributes to a lack of awareness about these programmes, how they function and where they sit in the larger frame of widening participation and access. Such understanding would permit some preliminary critical discussion about the potential advantages and drawbacks of this approach to diversifying medical education, compared to plausible alternatives. Specifically, the primary competing approach in this context would be the use of contextual admissions (i.e. reduced entry requirements) for a standard entry medical programme, with support for students flagged as 'widening access' (WA).

This piece aims to describe the structure, function and position of Gateway to Medicine programmes in the context of medical education. Additionally, this review culminates in a suggestion for faculty development, from the synthesised review findings, that could be applied in any medical or health professions education setting.

*This piece aims to describe the structure, function and position of Gateway to Medicine programmes in the context of medical education.*

## 2 | METHODS

This review aimed to answer the questions: what is known about the structure and function of Gateway years, and how are they situated in the wider field of WP/WA? This work used an overview approach, or nonsystematic survey and description of the literature, to synthesise key elements of WP/WA/diversity-oriented literature, particularly related to Gateway years.[10] Despite not being a systematic review, the search of the literature considered the following 'inclusion' criteria for primary sources: 'Gateway Years' as the population focus, published after 2000 (1 year prior to Gateway programmes launching nationally), and English-language articles. The PubMed MEDLINE database and Google Scholar were searched. All publication types were included, and references were examined for secondary sources to follow-up. Given the limited literature on these programmes, review of 'grey literature' and websites related to Gateway programmes identified by the Medical Schools Council (MSC), the representative body for all UK medical schools was also included as a secondary search. Sources were identified by the primary author (AND), then synthesised, with independent oversight from the other authors (PAT, GMF).

## 3 | FINDINGS

### 3.1 | Diversity lexicon: Complex beyond gateway years

In the United Kingdom, policy and practise to support students from underrepresented background pursue higher education is often referred to 'widening participation' (WP) or 'widening access' (WA). Unfortunately, these terms are often used interchangeably in the literature on Gateway years. However, there are distinctions between the policy and programmes that might be referred to as WP or WA.[11] Table 1 describes these distinctions and the definitions of these initiatives, with examples.

Terminology in diversity discourses is not exclusive to this WP/WA field.[12] Additionally, outreach programmes are listed as WP in Table 1, not WA, but outreach does not equal WP. 'Outreach' is

broadly providing services or programmes to groups that might not otherwise receive them. This could include providing health services to underserved communities or engaging the public to spread information. In the context of WP, outreach in medical education is specifically about providing support and encouragement to underrepresented groups to apply to, and gain entry, to medical courses.

### 3.2 | Gateway years: the selection process

There are a variety of ways to support underrepresented students in achieving a place in medical education (see Table 1). Gateway to Medicine years are a unique and specific type.

In the United Kingdom, medicine is typically an undergraduate degree. Traditionally, students matriculate directly after completing secondary (high) school. For medicine, specific subjects in school are required (Biology, Chemistry etc.) for standard entry, though the predictive validity of such academic metrics for 'success' in medicine is questionable.[13] However, there are other means of entry to medical school, as described in Figure 1, including Gateway Programmes. These are particularly important for those who would not be competitive in standard entry applications because of prior educational achievement.

### 3.3 | Are gateway programmes WP or WA?

Whilst they are generally referred to as WP initiatives, Gateway years are perhaps better described as WA. This is because they create a new means of entry for underrepresented students, though there is some overlap with WP, via recruitment activities. Students who qualify for Gateway year application are often identified well-before application, via other WP means. There is variability on the adjusted criteria medical schools consider, but typically, in order to apply for a Gateway year programme, students need to prove they are from a 'WP' background. This may include demonstrating that they attended state funded, nonselective school, lived in (local) deprived areas, qualified for bursaries or free school lunches or have parents with no higher education.

### 3.4 | Gateway years: Structure

The curricula of Gateway years are highly variable across medical schools. There are no national curriculum guidelines; these years are often designed to support matriculation to their specific associated medical school's standard entry curriculum. Gateway years even vary widely in name; in addition to 'Medicine with a Gateway

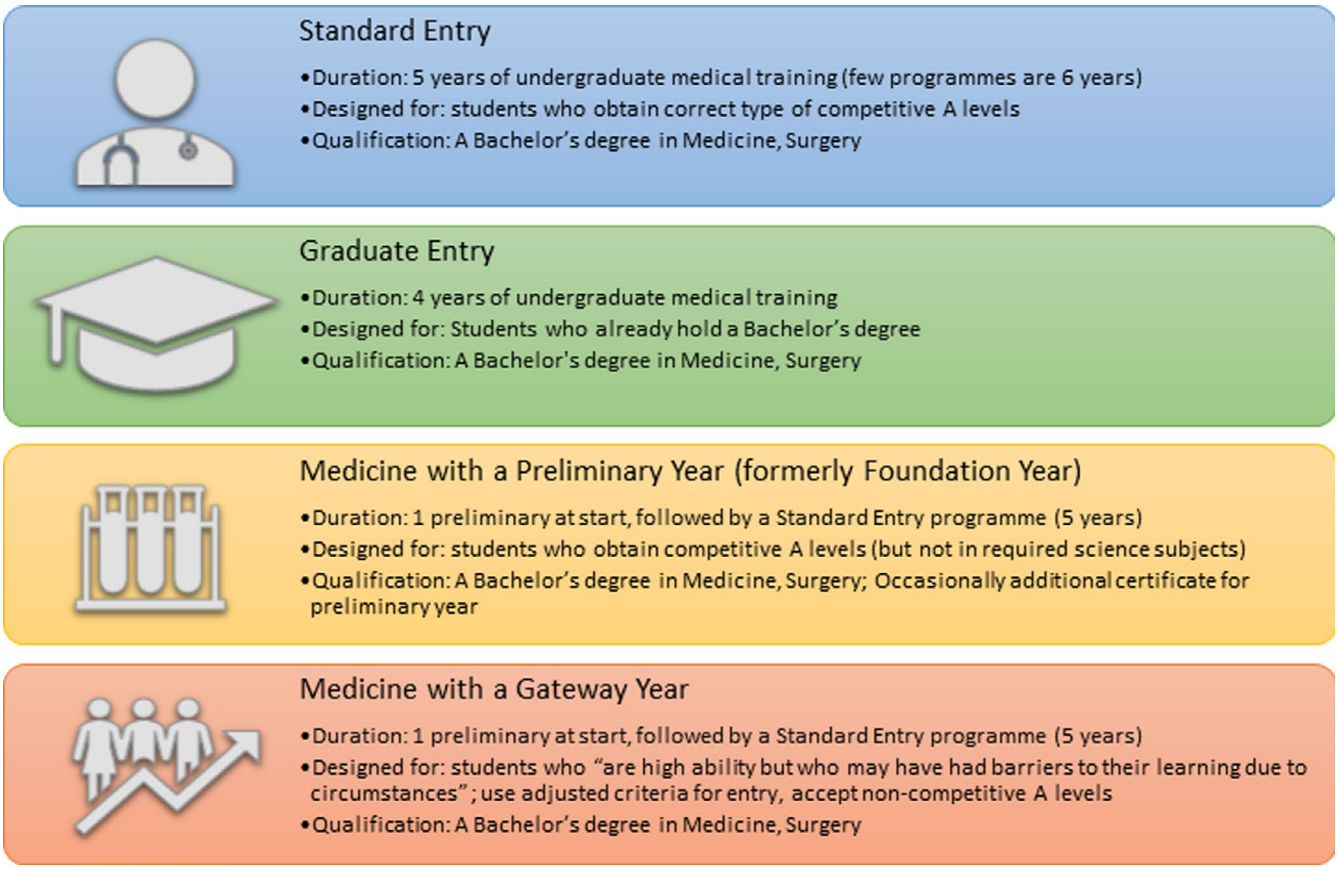


**FIGURE 1** Details about the four entry routes to medical education in the United Kingdom, including duration, targeted student demographic and resulting qualification. Of note, in the United Kingdom, the majority of medical students go to medical school from secondary school (A levels, Scottish Highers)

Year' and 'Gateway to Medicine', other names include the following: 'Gateway2Medicine', 'Foundation Year', 'Glasgow Access Programme (GAP)', 'Medicine with a Health Foundation Year', 'Extended Medical Degree Programme (EMDP)', and 'BM6' (or 'Year 0' programme). Varied nomenclature may contribute to wider lack of awareness about these programmes in the UK medical education.

*The curricula of Gateway years are highly variable across medical schools. There are no national curriculum guidelines …*

Generally, curricula include a high proportion of sciences, specifically biology. This is because these students are accepted with lower grades at Advanced (A) level school qualifications than would normally be accepted for standard entry.

Many Gateway years often include modules or courses in study skills, professionalism, psychology and/or clinical skills. These are intended to address the other aspect of Gateway selection that these students have had 'barriers to their learning' associated with their WP background. These modules are meant to foster development as medical students and provide skills that will help them be competitive and succeed in medicine. Details relating to the selection and structure of all Gateway years with 2021 entry have been extracted from review of their webpages and are provided in a table in the supporting information (supporting information Table).

If students complete their Gateway year, they are guaranteed a study place in Year 1 at the associated medical school. For almost all Gateway programmes, at this point, additional support and educational opportunities cease, and Gateway year students are afforded the same access and support as all of the other Year 1 medical students.

## 3.5 | Gateway years: What is the goal really?

Gateway years have been shown to be moderately successful in increasing the numbers of underrepresented students in medicine, thereby tackling in part the issue of inequity of socioeconomic representation.[1] However, they do raise a number of considerations.

Cohort sizes are small, typically averaging around 30 students. The years themselves can be costly to set-up and run; they require a new year of curriculum, student support and dedicated educators. Additionally, they can exacerbate stigma and 'otherness' for students who already are the minority in medicine. They might also perpetuate or contribute to the idea of a deficit model of education—that only by 'topping up' their educational attainment, that these students can 'earn' a place in medicine. The costs warrant critical examination, compared to what these programmes hope to achieve and their success in that respect.

So, why have Gateway years? What is their purpose? Like much diversity-associated work in medicine, this depends on who you ask, and their beliefs, or even assumptions, about medical education and society as a whole.[14-17] Many of these arguments relate to the notion that (medical) education is a meritocracy, where access and entry are determined by the merits of one's work. Some of the perspectives as to these 'why' and 'how' questions are presented in Figure 2. Viewpoints are extensive beyond these, but these present some simple summaries for some of the most prevalent basic assumptions. Particularly for Gateway programmes, this notion of 'train local, work local' (a common phrase in the United Kingdom), is a common assumption; students recruited from undeserved communities will be more likely to return to practise in said communities, thus better supporting healthcare recruitment. However, it is not conclusive if Gateway years are successful in trying to address greater healthcare inequity in this way; this review found no evidence to support this.

## 3.6 | Developing this diversity discourse for faculty development

Whilst points around diversity discourse may seem abstract to medical school faculty, particularly if not a medical school with a formal programme like a Gateway year, it is essential that issues around WP/WA are regularly and directly addressed in medical schools. As shown in Figure 2, there could be a variety of views informing individuals' perspectives and actions in facilitating WP/WA, including but not limited to Gateway years within medical schools. If beliefs regarding purpose and value are at odds, this could lead to serious issues in the implementation and facilitation of such programmes. Faculty development workshops, specifically focused on WP/WA work, should be regular occurrences in medical schools, particularly given the influence of organisational culture.[18] These workshops should not just be focused on function and metrics for such programmes but delve deeper to promote individual and group reflections on the purpose for diversity-related work. Box 1 presents a suggested format for a faculty development workshop, including a set of thought-provoking, but key, questions that may prompt discussion and also be important for educational research agendas and policy priorities.

*It is essential that issues around widening participation/widening access are regularly and directly addressed in medical schools.*

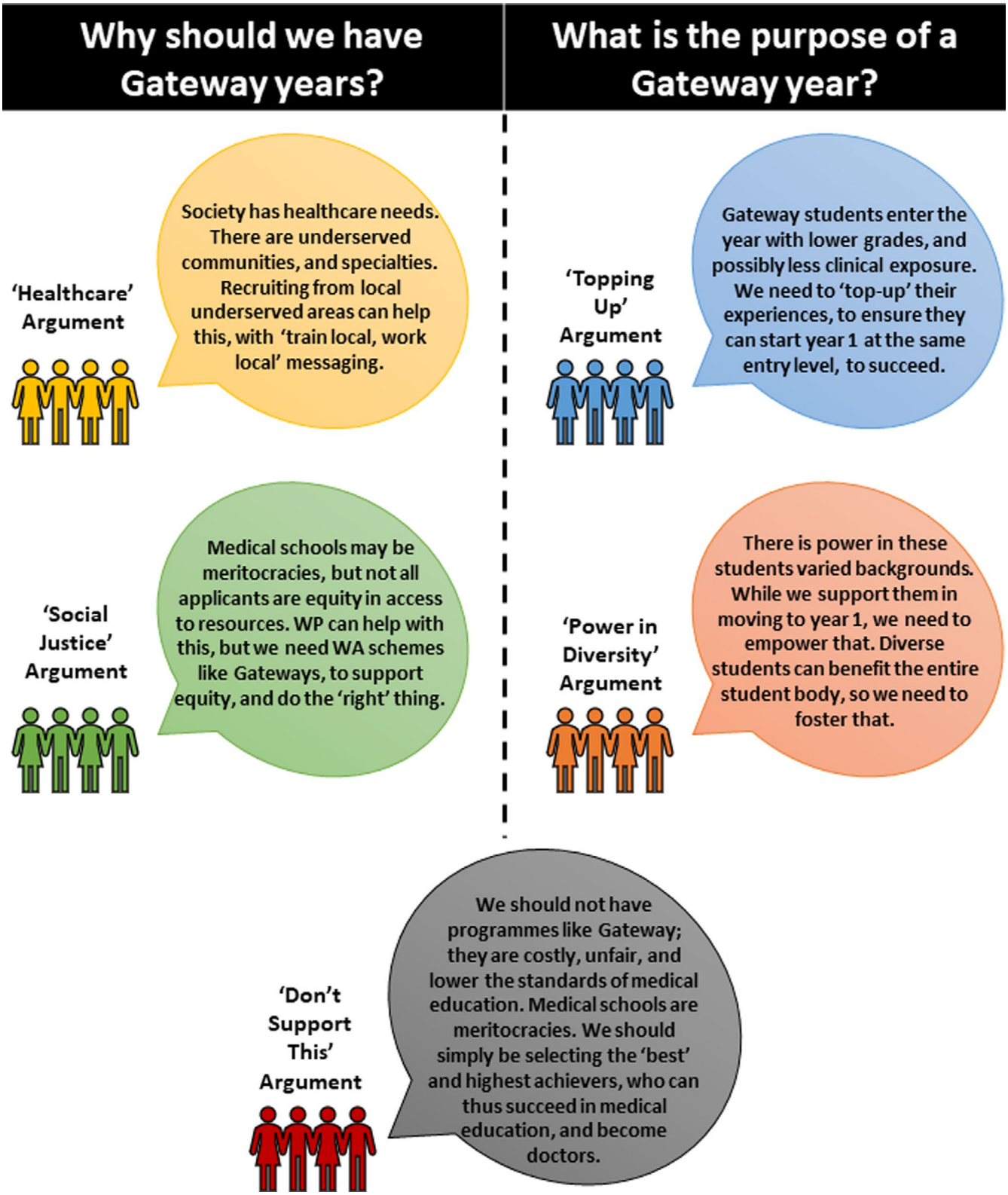


**FIGURE 2** Examples of the different discourses around the purpose and goals of Gateway years, and the perspectives of these ideologies

Faculty development workshops should also consider including stakeholders, particularly students with 'lived experience' as WP students, into these discussions. Understanding experiences of WP students, such as those who matriculate via Gateway routes, can help faculty to conceptualise issues and highlight concerns that may not be apparent but are particularly important to student experience, such as financial concerns or the presence of perceived stigma.[19] Additionally, other stakeholders, such as

**BOX 1 Suggested format, including probing questions, for a faculty development workshop. This could be for schools with Gateway years or any institution looking to facilitate more DEI discussions**

Prior to the workshop, faculty should reflect on personal experiences and views broadly on diversity, widening participation and widening access. This article is a resource that can be provided to individuals, to help prompt this reflection. Reflection questions may include:

- What are your views? Do you agree with any of the models, presented in Figure 2?
- Do you yourself coming from a 'WP background'? What about colleagues?
- How do you perceive the medical school's mission around WP?

The workshop can then involve large- or small-group discussions around these topics. Depending on the programmes a school has, these may include Gateway specific questions, such as:

- Early work indicates slightly larger attrition rates amongst Gateway students.[1] Is this the case at your institution? How can attrition be improved?
- What factors should be used to assess the cost-effectiveness of Gateway years? Are Gateway years a (cost-effective) way of diversifying the medical workforce? How would they compare to Standard Entry routes that consider contextual admissions, and provide additional support?
- Can Gateway programmes do more harm than good for students, considering points such as stigma, lengthier study and greater attrition rates?

The workshop may also centre around broader WP/WA questions, such as the following:

- Are WP/WA programmes with 'healthcare' arguments contributing to later medical career 'apartheid'? Are we exacerbating the divides between specialties and regional posts, such as inner city GPs versus hospital consultants and academics?
- How does differential attainment play a role in considering WP/WA? Does potential lower academic performance matter, or equate to substantially poorer patient outcomes? Or can patient outcomes be improved with more diverse providers?
- Beyond matriculation, should medical stakeholders be more vocal about the causes of differential attainment and access to medicine?
- How can the shared 'lived experience' from WP/WA students help inform local practice?

Any workshop(s) should include a summary session, ideally led by academic leadership, particularly those in specific WP posts. The goal should be to link individual reflection back to university mission and ethos, and focus on action-oriented work. Does a research group need to be formed, to further examine the school's work? Does a task force need to be created, to improve aligned WP/WA initiatives? Reflection should be met with action, and a plan to revisit discussions continuously.

clinicians and patients from local areas, may have views around the 'healthcare arguments' for WP that could be insightful for selection.

*Faculty development workshops should also consider including stakeholders, particularly students with 'lived experience' …*

## 4 | CONCLUSION

Whilst this article focuses on Gateway years, varied discourses in medical education make it difficult to definitively define any one 'true' goal of diversity, equity and inclusion work, which subsequently can lead to disagreement on what are the best means of achieving these goals. There may be key distinctions at the local and medical school levels that are currently missing in our understanding of diversity-oriented programmes, particularly those that are resource-intensive as Gateway years. There needs to be more open discourse in medical education around these perspectives. Difficult questions like these need to be openly discussed with transparency to ensure that the field is providing sustainable gateways of opportunity to underrepresented students, moving away from deficit models and the creation of additional fissures in our 'mirrors'.

*Varied discourses in medical education make it difficult to definitively define any one 'true' goal of diversity, equity and inclusion work.*

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## SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.

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